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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,902	09/05/2003	Keiichiro Hirata	16869G-086400US	1545

20350 7590 05/15/2007
TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

PATHAK, SUDHANSHU C

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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05/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,902

Applicant(s)

HIRATA ET AL.

Examiner

Sudhanshu C. Pathak

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan. 29th, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Sept. 11, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-2 & 5-11 are pending in the application.
2. Claims 3-4 have been canceled.

Response to Arguments

3. Applicant's arguments, regarding the specification objection, filed in amendment dated Jan. 29th, 2007, have been fully considered and are persuasive.

Therefore, the specification objection has been withdrawn.

4. Applicant's arguments, regarding the claim objections, filed in amendment dated Jan. 29th, 2007, have been fully considered and are persuasive. Therefore, the claim objections have been withdrawn.

5. Applicant's arguments, regarding the claim rejections, have been fully considered but they are not persuasive.

In regards to the specific argument "...there is absolutely no teaching or suggesting of synchronizing using data transmitted to another electronic device as substantially recited in the pending claims...", this is incorrect. The claims do not recite synchronizing using data transmitted to another electronic device. The claims recite "extracting a clock component from information flowing on said serial interface even when said electronic device is not receiving data directed to itself (Claim 1, lines 3-4); and synchronizing a data timing clock generated by said electronic device itself to a clock of said extracted clock component.... (Claim 1, lines 5-9)", this is interpreted as extracting a clock from information flowing on the serial interface when not receiving data, and this is disclosed in the Kucharewski wherein the

locking signal is interpreted as information flowing for synchronization before the data is transmitted i.e. the device is not receiving data, as is disclosed in the rejections below. The claim does not recite data flowing to another device and further does not disclose synchronizing using (during) data transmitted, indeed the claim recites extracting clock from information flowing. Furthermore, the claim does not recite another device.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 & 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (2004/0025090) in view of Kucharewski et al. (7,073,001).

In regards to Claims 1, 6 & 9, Miller discloses a synchronization control method for electronic device connectable to a serial interface, said synchronization control method (Abstract, lines 1-8) comprising: said electronic device monitoring synchronous state of a data reception timing clock generated by said electronic device itself with respect to said extracted clock component (Fig. 2A, element 100 & Fig. 2B & Fig. 4, element 400, 201 & Specification, Page 1, Paragraph 4, lines 1-12 & Specification, Page 1, Paragraph 7, lines 1-10 & Specification, Page 2, Paragraphs 19-20, 25-26) {Interpretation: The reference discloses a serial interface monitor so as to monitor the extracted clock component (Fig. 2B, element 209 & Fig.

4, element 201) and the internally generated clock of the electronic device (Fig. 2B, element 211 Fig. 4, element 201), wherein the synchronous state is monitored between the clocks i.e. absence of either clock, variation between clocks. Furthermore, monitoring is interpreted as detecting the state of the synchronization}. However, Miller does not explicitly disclose extracting clock component from information flowing on the interface when the device is not receiving data.

Kucharewski discloses multiple transceivers transmitting and receiving data employing serial channels (Column 1, lines 47-49) {Interpretation: serial channel is interpreted as serial interface}. Kucharewski further discloses detecting the desynchronized state (loss-of-synchronization) of the channel (Abstract, lines 1-7 & Column 2, lines 20-28). Kucharewski further discloses synchronizing the transmit / receive transceivers wherein the transmitter transmits a locking signal so as to establish a synchronized connection (Column 1, lines 40-55) {Interpretation: The reference discloses a synchronization process so as to provide alignment of the data (bit streams) at the receiver, by transmitting a locking signal which is interpreted as information}. Kucharewski further discloses performing synchronization between the transmitter and receiver before transmitting data (Column 1, lines 50-54) {Interpretation: The reference discloses performing synchronization before transmitting i.e. the receiver extracts the clock (synchronization) as is also referred in the instant specification on Page 1, Paragraph 4, when data is not received}. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Kucharewski teaches extracting clock signal when no data is

received and this is implemented in the synchronization method as described in Miller so as to provide a robust (reliable) data transfer and prevent data loss as the receiver deviates in clock alignment while transferring data, and also confirms the received data is received.

In regards to Claims 2, 5, 7-8 & 10-11, Miller in view of Kucharewski discloses a synchronization control method for an electronic device connectable to a serial interface as described above. Kucharewski further discloses said synchronization step is performed when a duration time of said out of synchronization is over a predetermined first criteria duration time (Column 5, lines 19-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Miller in view of Kucharewski satisfies the limitations of the claims.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

Art Unit: 2611

date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


CHIEH M. FAN
SUPERVISORY PATENT EXAMINER

Sudhanshu C. Pathak
Examiner
Art Unit 2611